

ORIGINAL

A description of the samples collected from the "12th Street Landfill/Dump Site" located along the Brandywine River near 12th Street, Norfolk Southern railroad, and I-495 in Wilmington, DE, is located below. A summary of the analytical data from samples collected at the Site is also attached. The survey conducted by EPA indicates that the disposal area is located in Tax Parcel 26-045.00-019. Lead is the primary soil contaminant. Drum contents can be characterized by lead, toluene, and 2-methylnaphthalene. EPA is now developing information that will characterize the threats posed by the Site.

12th Street Landfill/Dump Site
Removal Assessment, August 1999
SAMPLE DESCRIPTIONS



- SS-01 - Surface soil collected from River bank unvegetated soil near drum
- SS-02 - Surface soil collected from poorly vegetated soil near drum burial
- SS-03 - Surface soil collected from Site
- SS-04 - Surface soil from ditch allowing drainage through the berm/River bank
- SS-05 - Surface soil from vegetated drum burial area

- SED 01 - Sediment from mud flat at ditch (see SS-04)
- SED 02 - Sediment from mud flat area in middle of Site

- SB-01 - Subsurface soil collected from a 10' test pit (TP#1)
- SB-02 - Subsurface soil collected from a 7' test pit (TP#2) with buried drums
- SB-03 - Subsurface soil collected from a 7' test pit (TP#4) with ash material

TP-03-W Ground water sample collected from test pit #3

- DC-01 - Sample of contents of deteriorated drum at land surface near ditch (see SS-04)
- DC-02 - Sample of contents of buried drum in test pit #2
- DC-03 - Sample of contents of deteriorated drum at land surface in ditch (see SS-04)
- DC-04 - Sample of contents of buried drum in test pit E

- AM-01 - Ash material exposed in River bank
- AM-02 - Ash material exposed in River bank
- AM-03 - Ash material in test pit #1

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SURFACE SOIL SAMPLES (mg/kg)

	SS-01	SS-02	SS-03	SS-04	SS-05/Dup.
LEAD	206,000 J	139,000 J	7460 J	11,100 J	4590/5630 J
ARSENIC	33.6 K	48.8 K	117 K	24 K	96.3/96.9 K
ZINC	6120	1820	2280	2110	2310/2900
PHENOL	0.110 B	-	0.060 B	-	-
Dibenzofura	-	-	-	-	-
Pyrene	0.490 J	0.490	0.500	0.990	0.920/1.4
DEHP	22	1.4	0.900	1.4	0.890/0.980
Fluoranthene	0.450 J	0.390 J	0.480	0.840	0.800/1.2
Chrysene	0.360 J	0.260 J	0.300 J	0.900	0.420/0.630
2-methylnap	0.020 J	0.032 J	0.055 J	0.031 J	0.046/0.062 J
Benzo-a-pyre	0.270 J	0.300 J	0.370 J	1.0	0.470/0.630
Toluene	-	-	-	-	-
TICS	24	15	19	14	11

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SEDIMENT SAMPLES (mg/kg)

	SED-01	SED-02
LEAD	8370 J	1120 J
ARSENIC	15.7 K	5.9 K
ZINC	1180	153
Phenol	0.049	-
Dibenzofuran	-	-
Pyrene	0.260 J	-
Bis(2-ethylhexyl)phthalate	1.0	0.028 B
Fluoranthene	0.200 J	-
Chrysene	0.160 J	-
2-methylnaphthalene	-	-
Benzo(a)pyrene	0.170 J	-
Toluene	-	-
TICS	9	9

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GROUNDWATER (ug/L)

	TP-03-W
LEAD	5.3 B
ARSENIC	5.2
ZINC	75.5 J
Phenol	0.002
Dibenzofuran	-
Bis(2-ethylhexyl)phthalate	-
Pyrene	-
Fluoranthene	-
Chrysene	-
2-methylnaphthalene	-
Benzo(a)pyrene	-
Toluene	-
TICS	-

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SUBSURFACE (TESTPIT) SOIL (mg/kg)

	SB-01	SB-02	SB-03
LEAD	7670 J	264,000 J	148 J
ARSENIC	16.2 K	29.4 K	27.8 K
ZINC	13,000	5050	1510
Phenol	0.620 B	-	-
Dibenzofuran	0.085 J	0.050 J	-
Pyrene	0.110 J	1.0	0.026 J
DEHP	1.1	3.0	1.1
Fluoranthene	0.071 J	0.910	-
Chrysene	0.062 J	0.610	-
2-methylnaphthalene	0.130 J	1.3	-
Benzo(a)pyrene	0.059 J	0.620	-
Toluene	-	1.9	-
di-n-butylphthalate	1.1	0.068	-
TICS	17	28	13

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ASH MATERIAL (mg/kg)

	AM-01	AM-02	AM-03
LEAD	593	383	2570
ARSENIC	8.9	26	13.1
ZINC	13,400	10,500	776
Phenol	-	-	-
Dibenzofuran	-	-	-
Pyrene	-	-	0.062
DEHP	0.085	0.13	0.079
Fluoranthene	-	-	-
Chrysene	0.065	-	-
2-methylnaphthalene	-	-	-
Benzo(a)pyrene	-	-	-
Toluene	-	-	-
BARIUM	1610	6270	96.6
TICS			

J= Analyte present. Reported value may not be accurate or precise

K= Analyte present. Reported value may be biased high. Actual value is expected to be lower

B = Not Detected substantially above the level reported in laboratory or field blanks

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DRUMS (mg/kg)

	DC-01	DC-02	DC-03	DC-04
LEAD	207	106,000		3970
ARSENIC	5.1	15.3		19.7
ZINC	13,600	4,110		1490
Phenol	-	-	-	210
Dibenzofuran	470	-	-	-
Pyrene	-	-	-	-
DEHP	-	68	-	20
Fluoranthene	-	-	-	-
Chrysene	-	-	-	-
2-methylnaphtha	710	58	-	-
Benzo(a)pyrene	-	-	-	-
Toluene	730	21	0.065	1200
TICS				